

WHAT IS CLAIMED IS:

1. A method of manufacturing a composite film including a first film and a second film, the first film having a plurality of partition sections extending generally along one direction, facing each other with a gap region therebetween, and the second film being located in the gap region, the method comprising the steps of:

forming the first film on a substrate; and

applying a second film material in the gap region by an ink-jet method by traversing an ink jet with respect to the substrate generally along the one direction in which the partition sections are extended, and curing the second film material thus applied, so as to form the second film,

the first film comprising at least one gap width regulating section, by which a width of the gap region is narrowed.

2. The method as set forth in Claim 1 wherein:

the gap width regulating section comprises a part of a partition section which extends into the gap region.

3. The method as set forth in Claim 1, wherein:

the gap width regulating section comprises a portion

- 88 -

of the first film which is separate from any partition section.

4. The method as set forth in Claim 1, wherein:
the gap width regulating section has a corner and said corner is rounded.

5. The method as set forth in claim 1, wherein:
all corner portions of said partition sections and of said gap width regulating sections are rounded.

6. The method as set forth in Claim 1, wherein:
the first film comprises a plurality of gap width regulating sections spaced along said one direction,
the gap width regulating sections located in end parts of the gap region causing the width of the gap region to be narrower than the gap width regulating sections located in a middle part of the gap region.

7. The method as set forth in Claim 1, wherein:
the gap width regulating sections positioned in one end part of the gap region cause the width of the gap region to be narrower than the gap width regulating sections positioned in another end part, and

- 89 -

wherein the step of applying the film material comprises applying said film material in a direction beginning from the other end part toward the one end part.

8. The method as set forth in Claim 1, comprising, prior to the step of applying the second film material in the gap region, the steps of:

forming a photosensitive film on the substrate on which the first film has been formed, the photosensitive film being of a type which may be rendered more wettable with respect to the second film material by radiating specific light onto the photosensitive film; and

radiating the specific light onto the photosensitive film to cause that part of the photosensitive film which corresponds to the gap region, to be relatively more wettable than the part of the photosensitive film which is on the first film.

9. The method as set forth in Claim 8, wherein:

the substrate is transparent with respect to the specific light, and the first film shields the specific light, and

in the step of radiating the specific light, the specific

- 90 -

light is radiated through the substrate onto the photosensitive film, the first film serving as a mask blocking said specific light from portions of said photosensitive film.

10. The method as set forth in Claim 1, comprising:
forming the first film on the substrate using, a thermal imaging process using a laser beam.

11. A composite film, comprising:
a first film having a plurality of partition sections facing each other with a gap region therebetween; and
a second film formed by applying a second film material in the gap region by an ink-jet method,
the first film having at least one gap width regulating section, by which a width of the gap region is partially narrowed.

12. The composite film as set forth in Claim 11, wherein:

the gap width regulating section is a protrusion from one of the partition sections which protrudes into the gap region.

- 91 -

13. The composite film as set forth in Claim 11, wherein:

the gap width regulating section is a section of the first film separate from the partition sections.

14. The composite film as set forth in Claim 11, wherein:

the first film has a plurality of the gap width regulating sections spaced along at least one of said partitions,

wherein the gap width regulating sections located at end parts of the gap region cause the width of the gap region to be narrower than the gap width regulating sections located in a middle part of the gap region..

15. The composite film as set forth in Claim 11, wherein:

the gap width regulating sections positioned at one end of the gap region cause the width of the gap region to be narrower than the gap width regulating sections positioned in another end part; and

the second film material is applied beginning at the other end part toward the one end part.

16. The composite film as set forth in Claim 11, further comprising:

a functional film between the first film and the second film, the functional film being controllable in terms of wetting property with respect to the second film material,

the functional film having relatively less wettable part that is on the first film, and relatively more wettable part that corresponds to the gap region.

17. The composite film as set forth in Claim 11, wherein:

the first film is formed by a thermal imaging process using a laser beam.

18. A color filter, comprising:

a light-shielding film having a plurality of partition sectionsextending, in one direction with a gap region therebetween; and

a transparent color film formed by applying a film material in the gap region by an ink-jet method,

the light-shielding film having a gap width regulating section which narrows the width of the gap region.

- 93 -

19. The color filter of claim 18, wherein said film material is cured after application.

20. A display apparatus comprising
the color filter of claim 18.

21. A display apparatus comprising:
a color filter, including:

a light-shielding film having a plurality of
partition sections extending, in one direction with a gap
region therebetween, and

a transparent color film formed by applying a film
material in the gap region by an ink-jet method,

the light-shielding film having gap width regulating
sections which narrows the width of the gap region; and

an active matrix substrate facing the color filter and
having switching elements,

wherein the gap width regulating sections are aligned
with the switching elements.

22. A color filter for a display comprising a plurality
of pixels comprising:

a plurality of transparent color stripes, each stripe

- 94 -

extending over a plurality of pixels and comprising film material applied by an ink-jet method; and

an opaque matrix comprising portions which isolate the plurality of transparent color stripes from each other, said matrix having gap width regulating sections by which widths of the transparent color stripes are narrowed.

23. The color filter as set forth in Claim 22, wherein:

at least one of the gap width regulating section comprises a part of said matrix which protrudes into the area occupied by a transparent color stripe.

24. The color filter as set forth in Claim 22, wherein:

at least one of the gap width regulating sections comprises a part of said matrix located entirely within an area occupied by a transparent color stripe.

25. The color filter as set forth in Claim 22, wherein:

at least one of the gap width regulating sections has a corner section, the corner section being round.

26. The color filter as set forth in Claim 22, wherein:

a plurality of gap width regulating sections are spaced along a direction in which the transparent color

stripes extend,

a gap width regulating section located at an end part of a stripe causing the width of the stripe to be narrower than a gap width regulating section located in a middle part of the stripe.

27. The color filter as set forth in Claim 22, wherein:

a plurality of gap width regulation sections are spaced along a direction in which the transparent color stripes extend,

a gap width regulating section positioned further from the middle part of a stripe causing the width of the stripe to be narrower than a gap width regulating section positioned closer to the middle part of the stripe.

28. The color filter as set forth in Claim 26, wherein:

a plurality of gap width regulation sections are spaced along a direction in which the transparent color stripes extend,

a gap width regulating section positioned at one end of a stripe causing the width of the stripe to be narrower than a gap width regulating section positioned at the other end; and

the film material is applied beginning from the other

end part toward the one end part in the step of applying the film material.

29. A method for applying a printing medium to an individual area of a surface, comprising:

positioning within the individual area at least one barrier to flow of the printing medium; and

applying the printing medium in fluid form to said surface within said individual area.

30. A method as in claim 29, comprising applying the printing medium by an ink jet method.

31. A method as in claim 29, comprising:

positioning a plurality of barriers to flow of the printing medium within the individual area.

32. A method as in claim 31, wherein the respective barriers to flow vary in size.

33. A method as in claim 31, wherein the respective barriers to flow vary in configuration.

34. A method as in claim 29, wherein said at least

- 97 -

one barrier to flow includes an element protruding from the surface.

35. A method as in claim 31, wherein said barriers comprise elements protruding from the surface.

36. A method as in claim 29, comprising permitting the printing medium to flow around the at least one barrier.

37. A method as in claim 31, comprising permitting the printing medium to flow around each of said barriers.

38. A method for controlling application of a fluid printing medium to a surface within an individual area, comprising:

applying a fluid printing medium to said individual area; and

positioning within said area at least one barrier to flow of said fluid medium to control the application of said medium.

39. A method as in claim 38, wherein said fluid printing medium is applied by an ink jet method.

- 98 -

40. A method as in claim 38, wherein said individual area is on a surface, and said barrier comprises an element protruding from the surface to block flow of the fluid printing medium.

41. A method as in claim 38, comprising permitting flow of said medium around said barrier.

42. A method as in claim 38, wherein said method controls the thickness of the fluid medium applied to respective parts of the individual area.

43. A method as in claim 38, comprising providing a plurality of barriers at respectively different locations within said individual area.

44. A method as in claim 43, wherein said respective barriers are of differing size or shape.

45. A method as in claim 44, wherein said respective barriers exert different levels of control of fluid flow at said different locations.

- 99 -

46. A method as in claim 43, wherein said method controls the thickness of the fluid medium applied to respective parts of the individual area.